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| APPLICATION NO.   | FILING DATE  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |              |                       |  |  |
|---|--------------|----------------------|--|------------------|--------------|-----------------------|--|--|
| 10/750,909  | 01/05/2004   | Avraham Levy         | 27282  | 5381             |              |                       |  |  |
| 7590<br>Martin D. Moynihan<br>PRTSI, Inc.<br>P. O. Box 16446<br>Arlington, VA 22215 |              | 01/04/2007           | <table border="1"><tr><td>EXAMINER</td></tr><tr><td>IBRAHIM, MEDINA AHMED</td></tr></table>              |                  | EXAMINER     | IBRAHIM, MEDINA AHMED |  |  |
| EXAMINER  |              |                      |  |                  |              |                       |  |  |
| IBRAHIM, MEDINA AHMED   |              |                      |  |                  |              |                       |  |  |
|   |              |                      | <table border="1"><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>1638</td><td></td></tr></table> | ART UNIT         | PAPER NUMBER | 1638                  |  |  |
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| 1638  |              |                      |  |                  |              |                       |  |  |
| SHORTENED STATUTORY PERIOD OF RESPONSE  |              | MAIL DATE            | DELIVERY MODE  |                  |              |                       |  |  |
| 3 MONTHS  |              | 01/04/2007           | PAPER  |                  |              |                       |  |  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/750,909

Applicant(s)

LEVY ET AL.

Examiner

Medina A. Ibrahim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,6-10,12 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 6-10 is/are rejected.
- 7) ☐ Claim(s) 3,12 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of Group II, Claims 1-17 in the reply filed on 08/16/06 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). The restriction requirement is made FINAL.

Claims 1, 3, 6-10, and 12-13 are pending and are examined.

### ***Priority***

The status of the parent application 09/508,379 on page 1 of the specification should be updated. It is suggested that " pending" be replaced with ---now US Patent 6,759,569----.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 10 are indefinite in the recitation of "treating ...plants with a mobile DNA sequence". It is unclear how one would treat a plant with a mobile DNA. In addition, the phrase "mobile DNA" is not clearly defined in the specification, therefore, is

open to a variety of interpretations. Therefore, clarification is required to more clearly define the metes and bound of the claims.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over each of Scott et al (1984. HortScience 19(6): 874-876, Applicant's IDS), Bishop et al (1996. The Plant Cell 8:959-969, Applicant's IDS), and Scott et al (1995. Hortscience30 (3): 643-644, Applicant's IDS).

The claims are drawn to mutant miniature plant populations having reduced size in comparison to a commercial plant of the same species; mature to produce viable seeds or tubers at a density of at least ten fold higher than standard growth conditions used for the commercial plant of the same species, and capable of being crossed with the commercial plant, and carries a mutation induced by a mobile DNA. The claims are

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also drawn to said miniature plant, wherein the commercial plant is used for food, fibre or flowers, and produces a berry-type fruit or a plant of the Solanaceae family, and wherein the berry type fruit is tomato, grape, prune, eggplant, or apple.

Scott et al (1984) teach the miniature *Lycopersicon esculentum* tomato plant cultivar "Tiny Tim", which has the characteristics that it is determinate in growth habit, produces tomato fruits of cherry tomato-size with a fruit mass of 15-25 grams, and is nonparthenocarpic (page 875, column 2, lines 4-7. Scott et al also (1984) teach the commercial tomato cultivar "Severianin", and its ability to be crossed with another tomato plant of the same species, including Micro-Tom. Micro-Tom has desired traits, which include a miniature growth habit (see at least the Abstract on page 874).

Bishop et al teach a variety of miniature *Lycopersicon esculentum* plant lines and cultivars comprising the d or dx alleles (see page 959, column 1, lines 12-33). Bishop et al also teach that the miniature tomato plant cultivars of "Tiny Time", "Tom Thumb", and "Dwarf Stone" have been known and publicly available from as early as 1959, and that the miniature tomato plant cultivar "Dwarf Champion" has been known and publicly available as early as 1901, and a variety of miniature tomato plant lines have been made and characterized by various people from 1901 to 1996. Bishop et al also teach that said miniature tomato plants comprising the d or dx alleles might be crossed with other *L. esculentum* cultivars (see page 959, column 1, lines 12-18).

Scott et al (1995) teach the miniature *Lycopersicon esculentum* tomato cultivars "Micro-Gold", "Micro-Tom", "Florida Petite" and "Florida basket", and the miniature

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tomato breeding lines of "Florida basket" 7188" and "874379-1" (see page 643, lines 1-31).

The tomato plants taught by Scott et al (1984), Scott et al (1995), and Bishop et al differ from the broadly claimed plants only in their derivation and the process by they were made. However, the process of obtaining mutant miniature tomatoes would not confer a unique characteristic to the resultant mutant miniature tomato plants. See In re Thorpe, 227 USPQ 964,966 (Fed. Cir. 1985), which teaches that a product-by process claim may be properly rejected over prior art teaching the same product produced by a different process, if the process of making the product fails to distinguish the products. See also MPEP 2113.

#### ***Remarks***

Claims 1, 3, 10, and 12-13 are deemed free of the prior art of record.

Claims 3 and 12-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

No claim is allowed.

#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Medina A. Ibrahim whose telephone number is (571) 272-0797. The Examiner can normally be reached Monday -Thursday from 8:00AM to 5:30PM and every other Friday from 9:00AM to 5:00 PM. Before and after final responses should be directed to fax nos. (703) 872-9306 and (703) 872-9307, respectively.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anne Marie Grunberg, can be reached at (571) 272-0975.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

12/24/06

Mai

MEDINA A. BRAHIM  
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Medina A. Ibrahim', is written over the printed name and title.